

**UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF VIRGINIA**

SONY MUSIC ENTERTAINMENT, *et al.*,

Plaintiffs,

v.

COX COMMUNICATIONS, INC., *et al.*,

Defendants.

Case No. 1:18-cv-00950-LO-JFA

**CONTAINS HIGHLY CONFIDENTIAL –  
ATTORNEYS’ EYES ONLY  
INFORMATION**

**DECLARATION OF SAM BAHUN**

I, Sam Bahun, hereby declare pursuant to 28 U.S.C. § 1746 that the following statements are true and correct to the best of my personal knowledge and belief:

1. I am the Director of Strategic Accounts of MarkMonitor, Inc. (“MarkMonitor”), a company that, among other things, monitors online networks for infringing content. I have personal knowledge of the facts set forth herein and, if necessary, I would and could competently testify thereto if called as a witness in this matter. I submit this declaration in support of Plaintiffs’ motion to preclude evidence and argument concerning a spreadsheet Bates Numbered MM000236, which I understand Cox has included on its proposed exhibit list as DX 100.

2. I have 15 years of experience working within the anti-piracy industry, including in working with technical staff on anti-piracy services. The anti-piracy work I have been closely involved with includes monitoring of infringement on peer-to-peer networks on behalf of the movie, music, software, publishing, professional sports, and video game industries. I have

worked at MarkMonitor for a total of approximately nine years, and I have also worked at MediaSentry, another anti-piracy company.

3. In my duties at MarkMonitor, I have been closely involved with work that MarkMonitor has done for the Recording Industry Association of America (“RIAA”), on behalf of its member companies (the “Record Companies”) and the music industry more generally, related to detecting the online unauthorized distribution of sound recordings belonging to the Record Companies.

4. I previously submitted declarations in support of Plaintiffs’ motion for summary judgment (ECF No. 325-6) and in connection with Plaintiffs’ opposition to Cox’s motion for discovery sanctions (ECF No. 352-1). The latter included my summary judgment declaration as Appendix A for completeness. Certain information in those prior declarations also pertains to the issues raised in Plaintiffs’ motion concerning the ‘236 Spreadsheet. For the Court’s convenience and to limit duplication, I have attached true and correct copies of those declarations here at Appendix 1.

5. I understand that Cox has argued that certain works listed in the ‘236 Spreadsheet were not confirmed by Audible Magic to match Plaintiffs’ authentic works. Cox is wrong. Audible Magic confirmed that *all* music files included in the ‘236 Spreadsheet match Plaintiffs’ authentic works.

6. Specifically, I understand Cox has argued that “we know for a fact that for 2 percent of those files,” “10 percent do not have a match. It states right on there, it is 0 or negative 1. There is no dispute about that.” I understand Cox to be referring to [REDACTED]  
[REDACTED]  
[REDACTED]

In fact, they do not reflect information or data provided by Audible Magic at all.

7.

Executed in Tipp City, OH this 18<sup>th</sup> day of October, 2019

  
Sam Bahun

# Appendix 1

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**Introduction**

1. I am the Director of Strategic Accounts of MarkMonitor, Inc. (“MarkMonitor”), a company that, among other things, monitors online networks for infringing content. I have personal knowledge of the facts set forth herein and, if necessary, I would and could competently testify thereto if called as a witness in this matter. I submit this declaration in support of Plaintiffs’ Opposition to Cox’s Motion For Discovery Sanctions And To Preclude Plaintiffs’ Use Of MarkMonitor Evidence.

2. MarkMonitor is widely recognized as the global leader in enterprise brand protection, including various aspects of intellectual property infringement. Over half of the Fortune 100 companies, as well as over 1,300+ customers in over 50 countries, including leaders

in the technology, fashion, sports, entertainment, pharmaceuticals, media, automotive and healthcare industries, rely on MarkMonitor to help them protect their brands and content online.

3. Depending on our customers' needs, MarkMonitor provides antipiracy solutions through detection, verification, enforcement and remediation, and analytics. MarkMonitor's proprietary automated technology provides access to a secure web-based portal, with powerful online monitoring and comprehensive case management capabilities to gather data on how, where and when content is being used over a wide variety of channels, including peer-to-peer ("P2P"), cyberlockers, search engines, user generated content, live content, over the top (content over the internet without a traditional subscriber service), and Internet Protocol Television ("IPTV"). The data is then turned into actionable intelligence to assist MarkMonitor's customers in protecting their brands and intellectual property and controlling their anti-piracy programs. In this manner, MarkMonitor can identify and track piracy trends, and detect the use and distribution of copyrighted material and related infringements, including illegal downloading and unauthorized streaming. As a corollary to detection, MarkMonitor's proprietary technology employs multiple levels of verification to confirm the accuracy of all detected infringement, including automated digital fingerprint technology for fast and accurate large-scale verification and manual review of questionable files. MarkMonitor then works with its customers, depending on their needs, regarding notification, remediation and, at time, enforcement.

4. I have 15 years of experience working within the anti-piracy industry, including in working with technical staff on anti-piracy services. The anti-piracy work I have been closely involved with includes monitoring of infringement on peer-to-peer networks on behalf of the movie, music, software, publishing, professional sports, and video game industries. I have

worked at MarkMonitor for a total of approximately nine years, and I have also worked at MediaSentry, another anti-piracy company.

5. In my duties at MarkMonitor, I have been closely involved with work that MarkMonitor has done for the Recording Industry Association of America (“RIAA”), on behalf of its member companies (the “Record Companies”) and the music industry more generally, related to detecting the online unauthorized distribution of sound recordings belonging to the Record Companies.

6. In connection with Plaintiffs’ August 30, 2019 Motion for Summary Judgment, I prepared a declaration that provides an overview of the process MarkMonitor employed for the RIAA with respect to monitoring, verifying and sending infringement notices to Cox regarding Cox users downloading and uploading files on peer-to-peer (“P2P”) networks. I have attached a true and correct copy of that declaration here as Appendix A to provide additional context for and explanation of MarkMonitor’s process, including the documents that are the subject of Cox’s motion.

7. To supplement my prior declaration, I provide additional information below concerning MarkMonitor’s process and to help explain why Cox’s spoliation allegations are unfounded.

#### **MarkMonitor Takes Preservation Obligations Seriously**

8. In public filings in this case, picked up by news media, Cox has accused MarkMonitor of destroying critical evidence material to this case. Cox’s baseless allegations are false and have harmed (and risk additional harm to) MarkMonitor’s reputation.

9. MarkMonitor takes preservation obligations very seriously. At all times when MarkMonitor collects data concerning infringement, it preserves evidence in a way that allows

content owners to protect their rights and pursue enforcement, should they decide to do so. That is true in all cases, including in connection with MarkMonitor's work for RIAA at issue in this case.

10. MarkMonitor and RIAA entered several agreements concerning the infringement notice program at issue in this case. At all pertinent times, MarkMonitor understood the purpose of the program was to send copyright infringement notices to ISPs to inform them that users on their networks had been detected downloading or distributing unauthorized copies of copyrighted works, so that the ISPs could take action. MarkMonitor (or its predecessor, DtecNet Inc., collectively referred to herein as "MarkMonitor") performed such services dating back to 2008 and continuing through what I understand is the "Claim Period" in this case: February 1, 2013 through November 26, 2014.

11. The February 15, 2012 Statement of Work ("SOW") for the [REDACTED] [REDACTED] set forth the terms and obligations of MarkMonitor and RIAA in connection with, in relevant part, the [REDACTED]. The SOW specifically provided that [REDACTED]  
[REDACTED]  
[REDACTED] (RIAA\_00000017.) The RIAA and MarkMonitor did not enter into a separate SOW concerning any litigation program.

12. I was deposed by Cox's counsel, Diana Hughes Leiden, on June 13, 2019. As I explained in my deposition testimony, when MarkMonitor conducted the RIAA notice program at issue in this case, MarkMonitor understood the theoretical possibility that certain data could be used in future litigation. But the work done at the time was not, to my understanding, done for the purpose of litigation and litigation was not expected. The purpose of the program was to

provide notice to ISPs of specific instances of infringement occurring through their Internet service, so that the ISPs could do something about it. The SOW language cited above for the RIAA notice program is consistent with this notion as it expressly contemplated [REDACTED]

[REDACTED]

13. At no point during or before the Claim Period did MarkMonitor have an understanding that RIAA, the Plaintiffs in this case, or anyone else actually anticipated litigation against Cox or any other ISP using the MarkMonitor data generated in connection with the RIAA notice program.

14. Based on my experience working with RIAA over many years, I would know if MarkMonitor's P2P infringement detection, verification and/or notice data was used, or was to be used, in litigation. To my knowledge, the Plaintiffs' case against Cox filed in July 2018 is the first lawsuit since MarkMonitor began sending infringement notices to ISPs on behalf of RIAA, in which the data MarkMonitor collected for RIAA has been used for litigation.

#### File Verification

15. In 2008, on behalf of RIAA, MarkMonitor began monitoring for potentially infringing files being copied and distributed on P2P networks, and sending infringement notices to certain ISPs, including Cox.

16. In connection with that process, from 2008 through the Claim Period, MarkMonitor [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

17. Whether a suspected infringing file matches a legitimate copy of a copyrighted sound recording is a “yes/no” question. It is either a match or not a match. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]. That is all the information needed to confirm that the suspected infringing file matches a copyrighted work.

18. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]. I have described the MarkMonitor Spreadsheet further in paragraph 23 of my prior declaration attached here as Appendix A.

19. For every work listed in the MarkMonitor Spreadsheet, [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

20. In addition to the spreadsheet identifying each of the works, [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED].

**Additional Superfluous Information**

21. [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

a. [REDACTED];

b. [REDACTED],

c. [REDACTED].

d. [REDACTED]

22. [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

[REDACTED]

[REDACTED]

23. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

24. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

25. [REDACTED]

[REDACTED]

[REDACTED]

26. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

27. [REDACTED]

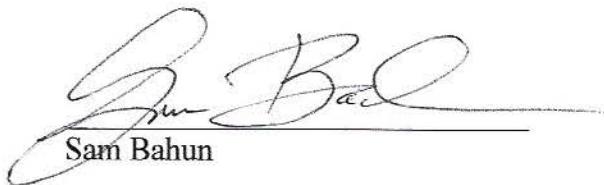
[REDACTED]

[REDACTED]

28. The core of MarkMonitor's business model (including as it relates to this case) requires it to gather valid evidence sufficient to protect our clients' copyrighted content. As stated herein, the superfluous data Cox contends was spoliated, was something we were not required to gather, nor was it relevant to our statement of work at the time, which was not performed for active litigation or in anticipation of litigation. Moreover, the Audible Magic data simply corroborates the [REDACTED]  
[REDACTED]

is immaterial to our ability to establish there was infringement of the identified works by Cox subscribers.

Executed in Tipp City, OH this 13<sup>th</sup> day of September, 2019



Sam Bahun

## APPENDIX A

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2. MarkMonitor is widely recognized as the global leader in enterprise brand protection, including various aspects of intellectual property infringement. Over half of the Fortune 100, 1,300+ customers in over 50 countries and industry leaders in technology, fashion, sports, entertainment, pharma, media, auto and healthcare trust MarkMonitor and rely on its

technology, expertise, and industry relationships every day to help them protect their brands and content online.

3. I have 15 years of experience working within the anti-piracy industry, including in working with technical staff on anti-piracy services. The anti-piracy work I have been closely involved with includes monitoring of infringement on peer to peer networks on behalf of the movie, music, software, publishing, professional sports, and video game industries. I have worked at MarkMonitor for a total of approximately nine years, and I have also worked at MediaSentry, another anti-piracy company.

4. In my duties at MarkMonitor, I have been closely involved with work that MarkMonitor has done for the Recording Industry Association of America (“RIAA”), on behalf of its member companies (the “Record Companies”) and the music industry more generally, related to detecting the online distribution of sound recordings belonging to the Record Companies.

5. Below I provide an overview of the process MarkMonitor employed for the RIAA with respect to monitoring, verifying and sending infringement notices to Cox regarding Cox users downloading and uploading files on peer-to-peer (“P2P”) networks. For purposes of this declaration, I use the term “Cox User” to refer to someone using the Cox Internet service.

6. This declaration is geared to a general audience. Though I could discuss the technology and MarkMonitor’s process in more technical terms, I assume that this level of detail is more useful to the Court.

#### **File Sharing Networks Monitored**

7. RIAA retained MarkMonitor to [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

8. By way of background, each P2P network is comprised of individuals with compatible software installed on their computers, which are connected to each other via the Internet. Such Internet-connected users on a P2P network are known as “peers.” Peers within a network use P2P software to communicate directly with each other over their Internet connections, including to download or disseminate files containing sound recordings. Peers can only reach and communicate with one another on a P2P network when they are connected to the Internet.

9. Some P2P networks, including BitTorrent, include a multi-source distribution model whereby the file data is divided into small parts, spread among the users on the network. Peers request pieces of data from each other continuously until they have completed the entire download. Whenever a peer has received a new piece of data, that peer then begins distributing it to other peers on the network who wish to download it. This design effectively eliminates one of the biggest bottlenecks of other file-sharing systems, where the download performance of all users is degraded when the demand for a specific file is high.

10. In the context of computer operating systems such as Windows and macOS, users identify files by their filenames, for instance as “report.docx” or “song.mp3.” P2P networks keep such filenames associated with files, but they go a step further. They use standardized procedures known as cryptographic hash functions to generate a single alphanumeric string—called a hash or hash value—for a file based upon the data contained within the file. Depending on the type of hash algorithm used, hashes are usually written as 32 or 40 alphanumeric

characters. Two files that have the same hash are identical to one other; they are copies of the same file and have the same contents. Two files that differ in even the smallest way will yield different hash values. P2P networks use such hashes in a variety of ways, including to recognize that multiple peers have a particular file the user is attempting to download. Relying on a common hash as an indicator the files are identical, the P2P network can provide the file to the downloader by pulling pieces from multiple peers.

11. If a P2P network user—including MarkMonitor acting as a peer—finds two files with the same name, it is possible their contents differ. However, if two files with the same hash are found, the contents of the two files are guaranteed to be identical.<sup>1</sup> The hash enables users to recognize a file is an exact duplicate of one whose music content has already been identified.

#### **Detection and Data Collection**

12. The search process and functionality of the MarkMonitor Software [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

13. MarkMonitor's Software [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

---

<sup>1</sup>For standard cryptographic hash functions, this guarantee is actually short of 100% at a technical matter, but by a negligible difference so close to zero that the guarantee widely is taken to be exactly 100% in practice.

#### 14. MarkMonitor's Software confirmed

## Verification of Infringing Files

15. For the work MarkMonitor was engaged in for RIAA generally (i.e., not just for notices to Cox) [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

16. Thereafter, each subsequent instance of the file was verified [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

**Notice Sending**

17. [REDACTED]

[REDACTED]

[REDACTED] MarkMonitor sent the notices to Cox's registered email address for receiving copyright notices.

18. From the period of January 2, 2012 to March 31, 2015, MarkMonitor sent 284,444 infringement notices to Cox on behalf of RIAA. Each notice issued under penalty of perjury with the information required under the Digital Millennium Copyright Act and under the name of the RIAA.

19. For this project, [REDACTED]

[REDACTED]

[REDACTED] Each P2P service communicates this information differently, but under the BitTorrent protocol, peers exchange “BitField” data from which the percentage of the total available sound recording(s) can be calculated. BitTorrent only populates this BitField data after it has verified the content the user possesses using the hash of each downloaded piece. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

### Production of Evidence

20. MarkMonitor provided several data sets and documents generated from the above-described processes, which I understand have been produced in discovery in this case and are attached to the Gould declaration.

21. Infringement Notice: PX 538 (bates numbered Plaintiffs\_00100723) is a representative infringement notice sent to Cox. Each of the infringement notices sent to Cox as described herein included the fields of information listed in 17 U.S.C. 512(c). The notices provide an email address to contact in the event the subject of the notice disputes the infringement reported to Cox. MarkMonitor has checked its records and has not identified any emails received disputing the infringement reports to Cox.

22. Notice Data: PX 13 (bates numbered Plaintiffs\_00286430) is a text file with [REDACTED] records of notices that, as per the process described above, MarkMonitor sent to Cox between January 2, 2012 and March 31, 2015. It includes data variables such as [REDACTED]

[REDACTED]

[REDACTED]

PX 14 (bates numbered Plaintiffs\_00286280) is an Excel file of the same data. [REDACTED]

[REDACTED]  
[REDACTED]  
23. [REDACTED] PX 11 (bates numbered Plaintiffs\_00286431) is an Excel file with [REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

24. Audio Files: PX 39 is a hard drive of audio files [REDACTED]

[REDACTED]  
[REDACTED]

MarkMonitor provided those files to Plaintiffs and I understand Plaintiffs produced them to Cox on a hard drive and also attached them to the Gould declaration. Anyone with the hard drive (PX 39) can listen to the audio recordings it contains.

25. Download Data: PX 16 (bates numbered Plaintiffs\_00286432) is an Excel file with [REDACTED]

[REDACTED] The records include, among other things, [REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
26. Case Packages: PX 33 (bates numbered MM000306) is a collection of [REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED] Due to the volume of the case packages, I

understand that two examples are attached to the Gould declaration rather than the entire set of [REDACTED]

Executed in Tipp City, OH this 29<sup>th</sup> day of August, 2019

  
\_\_\_\_\_  
Sam Bahun